



ARCHITECTURAL FACADE LIGHTING DESIGN PRINCIPLES

People Places - Revitalizing the Charm of Downtown



Figure 1.1 Rome



Figure 1.2 Paris



Figure 1.3 Tokyo

Tourists and vacationers that visit cities throughout the world number in the millions. What is so attractive about cities such as Rome, Paris, Tokyo, or New York?

The old streets of cities in Europe, or even in older American cities such as South Bethlehem, have a sense of human scale, a feeling of comfort, appropriateness, and a place where people enjoy gathering. Whether gathering on the deck of Tally Ho or in front of the low scale Design Center (formerly McCrory's 5 & 10), the streets of South Bethlehem provide a unique atmosphere. The specialty stores and restaurants, rich in ethnic background, can only be found in a turn of the century town such as South Bethlehem. These streets were designed by people for people.



Figure 1.4 The Design Center

A unique opportunity exists to draw a lot of business to downtown without the heavy automobile traffic incurred by other cities. The student population of Lehigh University can be drawn into the city between or after



classes. Streetscapes with lighted corridors (building facades) and highlighted landmark buildings can help draw students into town, as well as encourage people from the surrounding communities to come downtown to shop and dine.

The streetscapes of a community, neighborhood, or city are probably the most powerful indication of the state of the urban fabric. They provide a certain emotion, personality, and reputation of the place; they create an image in the mind of the users. If the streets are perceived as safe, secure, and exciting, they encourage all citizens to use and take pride in their city. If on the other hand, the streets appear confusing, poorly maintained, and cold, they are perceived as an uninviting, dangerous place that lacks civic pride.

Humans are social creatures and enjoy being with each other. If a place feels exciting, fun, and provides safety and security, people will gather in that area. As a result of more people gathering, the area will feel more secure, and generate even more excitement. This effect can be seen in Harrisburg, Pennsylvania. Years ago, City Island was known as a place for drugs and other illegal activities. Downtown Harrisburg was ranked as one of the country's worst cities. The redevelopment of City Island to a ball field and other family activities draws thousands of people a year. Downtown Harrisburg brings people from Baltimore and Philadelphia to visit and find out what the excitement is about. Only five years ago, all on-street parking was empty at 8:00pm and shops and restaurants closed. Today, Thursday through Saturday nights the meters and garages are parked full and the sidewalks are bustling.

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Figure 1.5 *Downtown Disney*

The creation of districts as proposed in the South Side Master Plan provides the opportunity for a similar revitalization of South Bethlehem. As the districts develop and community response is favorable, the nighttime safety, security, and convenience of downtown will become more and more important. The ability of merchants, both new and old, to work together will be key to ensure a visually pleasing environment.

Currently both the South Side and North Side of Bethlehem have several examples of good exterior lighting. The Cathedral Church of the Nativity added exterior lighting to the facade as part of recent renovations. The church creates a dramatic focal point as a visitor enters town across the Hill to Hill Bridge. Packer Chapel, on the campus of Lehigh University, provides a strong point of orientation for both students and the community. Structures such as Central Moravian Church, United Church of Christ on Market Street, and the First Presbyterian Church on Center Street are all good examples of lighting programs on the North Side of Bethlehem. By no means is this a comprehensive list of all lighted structures, only a small sample of some well designed structures. These structures were not included in the written portion of this report. However, the lighting techniques used were taken into consideration to ensure the creation of a well designed streetscape and skyline.

Objectives for Good Facade Lighting

The basic objectives of facade lighting can be grouped into four interrelated categories:

- **Skyline Views**
- **Orientation**
- **Streetscapes**
- **Civic Pride**

Skyline Views

From a distance the city's skyline should create a distinct image that has a sense of anticipation. Various arteries to the city will offer different skyline views. From Bethlehem's City Hall and the Fahy Bridge: the Rooney House, Holy Infancy Church, and Lehigh University have commanding visual presence. Entering from the Hill to Hill Bridge: the Cathedral Church of the Nativity, Lehigh Valley Railroad Building, Wilbur Mansion, and Sayre Mansion greet the traveler to town. University students have a unique view of town from atop the hill: the dense tree canopy and university buildings obscure the skyline view allowing only glimpses of the overall scene. From the East, spectacular views of the Bethlehem Steel stacks and equipment mark the entry to a town rich with heritage and strong industrial ties.



Figure 1.6 Steeples in winter

Orientation

Well designed patterns of streets add to the aesthetics and enjoyment of a city. Both drivers and pedestrians need quick and effective orientation; that is, the development of a visual sense of their location, destination, and pathways. This is of clear importance for safety, security, and convenience. The architectural facade lighting program should be coordinated to express and clarify the overall structure and organization of the city layout. Highlighting of important features such as nodes, monuments, landmarks, paths, or edges can enhance nighttime orientation.



Figure 1.7
*Custom House
Tower, Boston,
MA*



Figure 1.8 Holy Infancy
Church from a distance

Boston is a great example of orientation by landmark structures. As shown in Figure 1.7, the Custom House Building provides visual direction day or night. With great structures such as the Hill to Hill bridge and highly visible church steeples, South Bethlehem can provide plenty of visual cues from various points in town. Figure 1.8 demonstrates how visible the Holy Infancy Church steeple is from around town.

Streetscapes

As you move toward the center of the city, the pride of downtown should be revealed in warm, inviting, safe, and secure streetscapes. Expressing the beauty of the city's historically and culturally significant structures will entice more people to visit, shop, and dine in town. As the visual walls of the street brighten and interest grows, so will the crowds. This transformation is not instantaneous, and may take some time.

The streetscape program is particularly important to attract students from Lehigh University to spend time and money in the downtown area.



Figure 1.9 Residential street



Civic Pride

Civic pride and any beautification program go hand in hand. A beautiful town generates a sense of pride. State College, Pennsylvania is another town bordered by a major university. The civic pride of State College is enormous. The residents and merchants are proud to be a part of the community. This pride shows through the tremendous involvement found in events throughout the entire year, not just during the traditional school year.



Figure 1.10 Musikfest

Building owners throughout South Bethlehem should be encouraged to show their pride by lighting their buildings in a responsible manner to create an overall positive image of town.

Results of Achieving These Objectives

The desired outcome of this project has several beneficial results. If all four objectives are achieved, community pride will elevate to a new level. Regional and non-regional tourism could increase, thus strengthening the local economy. An increased level of awareness of physical sites and the cultural and historic significance they represent will lead to better historic and architectural preservation. Increasing excitement to be downtown will draw more people, thus creating a higher level of safety and sense of security.

All of this will create a stronger partnership between the grass roots community members of the city, Lehigh University, and Beth Works.

***“If you have
something that’s
beautiful and you’re
demonstrating that,
people are going to be
drawn to it.”***

***--Sarajane Williams,
as quoted in “The
Morning Call,”
Friday, July 26, 2002***